In the Specification:

On page 2, before the section entitled "BACKGROUND OF THE INVENTION", please insert the following new paragraph:

CLAIM OF PRIORITY

This invention claims priority to the following U.S. provisional patent application, which is incorporated herein by reference, in its entirety:

Berman, Provisional Application Serial No. 60/405,462, entitled "PRISM ASSEMBLY WITH CHOLESTERIC REFLECTORS," attorney docket no. 356508.01500, filed, August 23, 2002.

Please replace the paragraph beginning on page 5, line 3 with the following amended paragraph:

The present inventors have discovered a number of advantages in prism systems that utilize cholesteric layers in one of more optical components of the prism systems. The invention relates particularly to video projection systems utilizing reflective microdisplays. More particularly, in one embodiment, the invention is a configuration of a prism assembly that is based on cholesteric optical components and is suitable for use within a "three channel" Liquid Crystal on Silicon (LCoS) ~~LCoS~~ video projector.

Please replace the paragraph beginning on page 5, line 14 with the following amended paragraph:

Fig. 1A is drawing of a reflective microdisplay based video projector;

Fig. 1B is an illustration of interactions of unpolarized white light with a "right hand green" cholesteric film;

Fig. 1C is an illustration of interactions of unpolarized white light with a "right hand red" cholesteric film;

Fig. 1D is an illustration of interactions of unpolarized white light with a "right hand ~~green~~ blue" cholesteric film;

Fig. 2 is an example cholesteric based kernel according to an embodiment of the present invention;

Fig. 3 is an illustration of lightpaths through the cholesteric based kernel shown in Fig. 2;

Fig. 4 is a second example embodiment of a cholesteric based kernel according to an embodiment of the present invention; and

Fig. 5 is an illustration of lightpaths through the cholesteric based kernel shown in Fig. 4.

Please replace the paragraph beginning on page 7, line 3 with the following amended paragraph:

Referring again to the drawings, wherein like reference numerals designate identical or corresponding parts, and more particularly to Fig. 1B thereof, there is illustrated the interaction of unpolarized white light with various thin layers of cholesteric liquid crystal. The variation of cholesteric layer illustrated in figure ~~1A~~ 1B can be called "right hand green". In this case, the molecular structure of the

cholesteric is such that the layer transmits green left hand circularly polarized light. Green right hand circularly polarized light is specularly reflected. Blue and red light of both polarizations are transmitted. The width of the reflective band (bandwidth) of the cholesteric material is determined as follows:

$$\Delta\lambda = (\Delta n \lambda max)/navg$$

where Δn is the birefringence and navg the average index of refraction of the cholesteric.

Please replace the paragraph beginning on page 8, line 4 with the following amended paragraph:

Fig. 1C illustrates the interaction of unpolarized white light with a layer of right hand, ~~blue~~ red cholesteric. As shown, all ~~red~~ blue and green light is transmitted. Right hand ~~blue~~ red light is specularly reflected and left hand ~~blue~~ red light is transmitted.

Please replace the paragraph beginning on page 8, line 8 with the following amended paragraph:

Figure 1D illustrates the interaction of unpolarized white light with a layer of right hand, ~~red~~ blue cholesteric. As shown, all ~~blue~~ red and green light is transmitted. Right hand ~~red~~ blue light is specularly reflected and left hand ~~red~~ blue light is transmitted.

Please replace the paragraph beginning on page 12, line 1 with the following amended paragraph:

A blue component (B-RHCP) of the RHCP-M is reflected off the right hand blue cholesteric 252 of the cholesteric based beam splitter 250 toward the blue microdisplay 262. It passes through a ¼ lambda waveplate 256 and is converted to linear ~~polarizatrion~~ polarization. Reflection off the microdisplay imposes pixel by pixel polarization modulation in the reflected beam. Upon reflection by the blue microdisplay 262, the quarter waveplate 256 reconverts the image containing blue component back to circular polarization (now left hand), B-LHCP, which then passes through both the right hand blue cholesteric 252 and the red cholesteric 254 toward the output (an additional quarter waveplate 268 is inserted to convert the light beams back to linear polarization for output).

Please replace the paragraph beginning on page 13, line 18 with the following amended paragraph:

Also note that the "joints" between the components in the optical path can be conventional, that is, a rigid adhesive. Alternately, the joints can be liquid filled as described in U.S. provisional patent application no. 60/322,490 entitled "An Improved Configuration and Means of Assembling the Light Management System used in a Microdisplay Based Video Projector" submitted September 2001, and *Berman et al.*, U.S. Patent Application, Serial No. 10/202,595, filed 07/24/02, entitled "Method and Apparatus for Configuration and Assembly of a Video Projection Light Management System". A further advantage of utilizing liquid filled

joints is the possibility of reducing component count by eliminating the spacer glasses by adjusting the thickness of the liquid joints. Alternately, the gaps can be "filled" with air (possibly requiring anti-reflection coatings on exposed surfaces).

Please replace the paragraph beginning on page 15, line 18 with the following amended paragraph:

In describing the present invention illustrated in the drawings, specific terminology is employed for the sake of clarity. However, the present invention is not intended to be limited to the specific terminology so selected, and it is to be understood that each specific element includes all technical equivalents which operate in a similar manner. For example, when describing cholesteric composed of a layer of cholesteric film, any other equivalent device, such as a cholesteric liquid embedded between layers of glass, or another device having an equivalent function or capability, whether or not listed herein, may be substituted therewith. Furthermore, the inventors recognize that newly developed technologies not now known may also be substituted for the described parts and still not depart from the scope of the present invention. All other described items, including, but not limited to prisms, optical elements, depositions, films, encapsulated materials, fittings, air gaps, spacer elements, angles of incidence, re-arrangement or alternative placement of materials, etc should also be ~~consider~~ considered in light of any and all available equivalents.

Page 13, line 5, please insert the following paragraph.

"As shown in Fig. 2, a prism assembly is illustrated that includes a cholesteric based beam splitter (cholesteric prism) 250. The cholesteric beam splitter has a blue cholesteric 252 and a red cholesteric 254. In other embodiments, the cholesterics comprise other color combinations. For example,

any of blue and green cholesterics, and red and green cholesterics. Ultimately, such prism assemblies are installed in a projection device, such as a television."